

REMARKS

Claims 1-67 were pending in the application, of which Claims 1, 11, 13, 32, 33, 41, 46, 50-54, 62, and 67 are independent claims. All claims stand rejected. The rejections are traversed. Although certain claims have been amended, they are not amended for reasons of patentability.

Regarding Rejections Under Section 112, ¶ 1

Claims 1-67 stand rejected under 35 U.S.C. § 112, ¶ 1 because of a purported lack of an enabling disclosure. According to the Office Action, one of ordinary skill in the art could not have interpreted “how to access a shared repository without having a connection to the network.” The Applicants respectfully disagree.

As disclosed at best in FIG. 1, and on page 6 of the Applicants’ specification, computing nodes are interconnectable over a network connection (20) and each node is interconnected with the shareable storage over a storage connector (24). One of ordinary skill in the art would understand that storage connections are different from network connections, and were well known. Such an arrangement is even discussed in U.S. Patent No. 5,666,486 to Alfieri et al., which was relied-on by the Examiner. In Alfieri, as shown in FIG. 1, the nodes communicate with each other over an interconnect (36) and with shareable storage over a shared I/O bus (32), such as a SCSI standard bus (Col. 3, ll. 46-52). One of ordinary skill in the art could easily have made the disclosed invention at the time of filing, without undue experimentation.

Withdrawal of the rejections under 35 U.S.C. § 112, ¶ 1 is respectfully requested.

Regarding Rejections Under Section 112, ¶ 2

Claims 1-67 stand rejected under 35 U.S.C. section 112, ¶ 2. The rejections are traversed.

As for the recitation of “accessing, by a member node, the cluster definition...,” either node can access the cluster definition as claimed. That is clear from the claim. There is no need to limit the claim as interpreted by the Examiner. As such, this rejection is traversed.

As for the recitations related to “network connectivity”, that relates to the connection between nodes. Because the shared repository does not rely on the network connection, nodes can

access shared repository regardless of the ability to communicate directly with other nodes. The Examiner's interpretation is contrary to the claim and the Applicants' disclosure. As such, this rejection is traversed.

As for the recitations to "requesting a change to the cluster definition...", any number of nodes, including the coordinator nodes, can make the request. Furthermore, the cited claim is directed to a computer program product. The rejection is therefore traversed.

As for the recitations to "directing a non-member to access the cluster definition...", this aspect can be performed by any node, including non-coordinator nodes. The claim is believed to be clear. As such, the rejection is traversed.

Withdrawal of the rejections under 35 U.S.C. § 112, ¶ 2 is respectfully requested.

Regarding Rejections Under Section 103

Claims 1, 5, 7-9, 11-13, 17, 19-21, 27, 29-33, 37, 3041, 43, 45-47, 50, and 53 stand rejected under 35 U.S.C. § 103(a) based on Alfieri in view of U.S. Patent No. 6,092,213 to Lennie et al. and further in view of U.S. Patent No. 5,964,886 to Slaughter et al. Furthermore, Claims 2-3, 10, 14-15, 22-23, 34, 36, and 42 stand rejected under § 103(a) based on Alfieri-Lennie-Slaughter '886 in further view of U.S. Patent No. 6,014,669 to Slaughter et al. The rejections under § 103 are traversed.

It is noted with appreciation that Claims 4, 6, 16, 18, 24-26, 28, 35, 38, 44, 48-49, 51-52, and 54-67 are not subject to art rejections, including independent Claims 51-52, 54, 62, and 67.

As previously discussed in other Replies, the Applicants' claimed invention permits clusters to be formed "regardless of network connectivity" between nodes. Prior art systems required direct communications between nodes over the network connection. The Applicants can form a cluster with access to only a shared repository to which the nodes are connected using a storage connection. This claim feature is not taught or suggested by the cited references.

The primary reference relied on in all rejections is Alfieri. Alfieri has a similar physical structure to the Applicants' disclosed system. As noted above, Alfieri employs two connections, a network interconnect (36) between nodes and a shared cluster I/O bus (32) between each node and a shared storage device. Thus, Alfieri includes an off-network connection to the shared storage

device (28). Furthermore, Alfieri stores a membership database (34) on the shared storage device (28), including persistent node configuration information (40) and active membership state (42). Alfieri, however, forms clusters differently than claimed.

While the Applicants' claimed invention grants "membership in the network cluster regardless of network connectivity," Alfieri requires network connectivity. For example, as explained by Alfieri at best, at column 7, line 56 through column 8, line 2, an interconnect failure between nodes will prevent a node from joining the cluster. Alfieri therefore teaches away from the claimed invention.

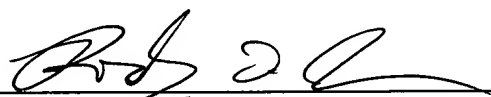
The remaining references do not address the recited "membership node having membership in the network cluster regardless of network connectivity." Nor does Alfieri offer any motivation to look elsewhere. Consequently, the claims are believed to be patentable over the cited references.

Reconsideration of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,
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